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67801 7590 11/23/2011 MARTIN D. MOYNIHAN d/b/a PRTSI, INC. P.O. BOX 16446 ARLINGTON, VA 22215				
EXAMINER EDWARDS, LYDIA E				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/561,839

Applicant(s)

DEUTSCH ET AL.

Examiner

LYDIA EDWARDS

Art Unit

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) See Continuation Sheet is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-SB006)
Paper No(s)/Mail Date See Continuation Sheet
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

Continuation of Disposition of Claims: Claims pending in the application are 1-

3,6,7,12,18,22,27,29,35,42,43,48,49,56,68,74,86,90,91,121,130,132,139,153,178,179,181,186 and 193-214.

Continuation of Disposition of Claims: Claims rejected are 1-

3,6,7,12,18,22,27,29,35,42,43,48,49,56,68,74,86,90,91,121,130,132,139,153,178,179,181,186 and 193-214.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :10/31/2011, 10/11/2011, 9/26/2011, 9/14/2011, 9/06/2011, 8/30/2011, 8/29/2011, 8/08/2011, 8/02/2011, 7/27/2011, 7/20/2011, 6/27/2011, 6/13/2011, 6/06/2011, 5/03/2011, 4/20/2011, 4/12/2011, 4/04/2011, 3/31/2011 and 3/30/2011.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 7/12/2011 have been fully considered but they are not persuasive.

In light of the current amendment to claim 1, a new rejection follows below.

In light of the current amendment to claims 195 and 197-199, the 112 4th paragraph rejection of claims 195 and 197-199 has been withdrawn.

In light of the current amendment to claim 199, the statutory double patenting rejection of claim 199 has been withdrawn.

In response to Applicant's argument regarding the 112 2nd paragraph rejection of claims 43 and 214, the examiner respectfully disagrees. Applicant has failed to identify dimensional units to express the interwell area thus; the interwell area has still not been defined. Applicants state that the "interwell area" means the space between the wells however, from the passages defined by applicants, this is not clearly stated.

In response to Applicant's argument regarding the 112 2nd paragraph rejection of claim 48, the examiner respectfully disagrees. Applicant has failed to define the meaning of knife-edged.

In response to applicant's argument that *Kim teaches away from the structure of claim 1*, the examiner respectfully disagrees. Claim 1 does not provide any structure that is capable of performing such functions as preventing loss or migration of cells during storage, movement, testing and observation, and to inhibit or delay adhesion of the living cells. Kim teaches in

Paragraph 139 wherein the first layer [150] may be treated, conditioned or coated with a substance that resists cell attachment. Thus when the first layer is removed, the cells in the micro-orifices [300] are not affected as taught above that first layer [150] is coated with a substance that resists cell attachment (See Paragraph 205). Therefore, Kim does not teach away from the structure of claim 1.

Furthermore, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

The examiner has interpreted the gel matrix of Bochner to be a thing that lies on, over, or around something especially in order to protect or conceal it of which is the same as that that would define a cover. The organisms of Bochner are clearly surrounded and concealed by the gel matrix. Thus, the gel matrix meets the definition of that of a cover.

In response to Applicant's argument that Kim teaches away from the structure of claim 1, the examiner respectfully disagrees. Claim 1 only provides structural limitations for a plurality of wells configured to hold a living cell, and a carrier for said wells. Kim teaches orifices [300] which are equivalent to wells of instant claim 1 and he also teaches wherein the orifices are carried by support [140]. Furthermore, the claim lacks the teaching of a means that is capable of performing such functions as wherein *"said wells are configured to prevent loss or migration of cells during storage, movement, testing and observation, and to inhibit or delay adhesion of the living cells"*.

In response to Applicant's argument that Kim teaches away from Bochner, the examiner respectfully disagrees. Kim teaches in Paragraph 0207 *that the cell migration/motility assay of the present invention, the support, such as support [140], is first coated with a coating [220] such as extracellular matrix proteins or matrigel (not shown). Cells are then plated onto the coated support. The migration or movement of the cells through the matrigel is observed. In still another embodiment of the assay of the present invention, the matrigel can contain test agents.* It is clear that the test agents can be applied before the wells are covered. Thus, the cells can be observed within the gel cover therefore, there is no need to remove the gel from the wells for observation.

Moreover, Kim also teaches in Paragraph 0139 wherein *the first layer [150] may be treated, conditioned or coated with a substance that resists cell attachment so that when the first layer [150] is lifted from the support, the risk of damaging cells is reduced. Thus, the layers of Kim once pre-treated can be removed with little risk of damaging the cells.*

In response to applicant's argument that Alberte et al. is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Alberte et al., Kim and Bochner are from the same field of endeavor as they relate to high throughput screening.

Furthermore in response to applicants regarding the cited passage of Alberte et al., Alberte et al. clearly states in Paragraph 0115 *the present invention relates to a method of inhibiting the adhesion to a surface by a bacterium, fungus, virion, freshwater invertebrate, or*

marine invertebrate, comprising the step of treating a surface with an effective amount of a compound of the present invention. In certain embodiments, said surface is a portion of an exterior or interior surface of a laboratory apparatus.

In response to applicant's argument that the cells in Bochner do adhere to the wells, the examiner respectfully disagrees. The cells of Bochner are held in a gellable fluid thus the majority of cells are suspended in the gellable fluid and not adhered to the wells. The examiner takes the position that it is not possible for each and every cell to adhere to the well when suspended in a gellable fluid. If the gellable fluid was not present, the cells would adhere to the well bottom. Thus the presence of the gellable fluid prevents loss or migration of cells during storage, movement, testing and observation, and to inhibit or delay adhesion of the living cells.

In response to applicant's argument regarding Kim not teaching expandable wells, applicant is directed to paragraphs 195 and 205. Paragraph 195 teaches wherein mechanical pressure may be maintained on the layers throughout the course of the experiment since PDMS can deform under pressure. Thus teaching wherein the wells are capable of being expanded during experimentation.

In response to applicant's regarding intended use limitations, the examiner respectfully disagrees. Claim 1 provides functional language for which no corresponding method step(s) and/or further structural limitation are provided to express how the functions as described in claim 1 would be carried out. Thus, it is not clear how the device of instant claim 1 is even capable of providing such limitations. Therefore, the examiner has interpreted the language of instant claim 1 to be intended use.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3, 6-7, 12, 18, 22, 27, 29, 35, 42-43, 48-49, 56, 68, 74, 86 and 90-91 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, claim 1 teaches wherein ***"said wells are configured to prevent loss or migration of cells during storage, movement, testing and observation, and to inhibit or delay adhesion of the living cells"*** however, the claim lacks the teaching of a means that is capable of performing such functions. How does a well(s) by itself prevent loss or migration of cells during storage, movement, testing and observation, and to inhibit or delay adhesion of the living cells?

Claims 43, 48 and 214 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claims 43 and 214, applicant has failed to define via the specifications and/or disclose via the drawings as to what and how the interwell area between two said wells defines the well structure. Applicant has referred to descriptions in the specification; however, those descriptions merely mention that the interwell area is substantially zero and do not clearly define what is meant by the "interwell area".

Regarding Claim 48, applicant has failed to define via the specifications and/or disclose via the drawings as to what and how knife-edge defines the well structure. Applicant has referred to descriptions in the specification; however, those descriptions merely mention that the wells are substantially knife-edged and do not define knife-edged.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3, 6-7, 18, 22, 27, 29, 35, 42-43, 49, 56, 68, 86, 121, 130, 132, 139, 153, 178-179, 181, 186, 193-197, 199-209 and 214 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (US 20030030184) in view of Bochner et al. (US 5627045) in light of Alberte et al. (US 20020052003).

Regarding Claims 1, 35, 42, 56, 86, 195, 197, 199-201, 203-209 Kim et al. ('184) teaches a device for holding living cells, the device comprising a carrier [100] having a plurality of juxtaposed wells [170] disposed on a surface [140] each well configured to hold at least one living cell (Paragraphs 135 and 215 and Figures 1). Kim et al. does not specifically state wherein said wells prevent loss or migration of cells during storage, movement, testing and observation, and inhibit or delay adhesion of living cells thereto.

However, Kim discloses wherein the cells are allowed to attach to the support (surface) [140] and to grow to confluence. The walls of the micro-orifice [300] constrain the cell(s) and the cells take on the shape of the micro-orifice [300], e.g., circular. A test agent is applied through the micro-orifices [300] and is allowed to contact the cells. The first layer (surface) [150] is removed and the cells are observed. If the test agent affects cell movement, the cell will be "stuck" in place as-it was patterned and-may not change shape, i.e., it will remain circular if the patterning member had circular orifices.

Bochner et al. ('045) teaches a method of manipulating cells, comprising: providing a plurality of wells of a well-bearing component, each well configured to hold at least one living cell; holding a plurality of living cells in a plurality of said wells; placing a gellable fluid including but not limited to alginate (Col 8, lines 41-42), in proximity with said surface so as to fill said plurality of wells; and gelling said gellable fluid so as to form a gel cover (Col 8, line 65-Col 9, line 34).

The examiner has interpreted the gel matrix of Bochner to be a thing that lies on, over, or around something especially in order to protect or conceal it of which is the same as that that would define a cover. The organisms of Bochner are clearly surrounded and concealed by the gel matrix. Thus, the gel matrix meets the definition of that of a cover.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Kim with the gelling agents as taught by Bochner et al. in order to provide a testing system that does not spill from the microplate, even if the microplate was inverted therefore, preventing loss or migration of cells during storage, movement, testing and observation. Moreover, it allows a novice to work with bacteria and study their biochemical characteristics with a reduced chance of contamination.

Kim et al. does not specifically state wherein the entire interior of the well inhibits adhesion of living cells. However, he does disclose wherein the first layer [150] comprising the walls of each micro-well [150a] of the micro-orifice [300] may be treated, conditioned or coated with a substance that resists cell attachment (Paragraph 139). The flat bottom (See Figures 1c, 8c, 10c, and 11c) of each micro-well [140a] on the upper surface of the support [140] is treated with coating [220] which may be made of any substance that achieves a desired effect on the cells to be arrayed or may be made of any substance to assist in the arraying of the cells or it may be a bio-inert coating (Paragraphs 155 and 198). Kim et al. is silent towards the second layer [160] being treated with a coating. The examiner interprets the bio-inert material of Kim et al. to be equivalent to a substance that resists cell attachment.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to treat, condition, or coat the entire microwell with a substance that resists cell attachment to reduce the risk of damaging cells when the first and second layers need to be separated from each other and/or the support. As further evidenced by Alberte et al. it was well known in the art at the time of the invention to use of a compound or composition in a

method for inhibiting bioadhesion to a surface of a laboratory apparatus (Abstract, Paragraphs 115 and 118).

Regarding Claims 35 and 56, 195, 197, with respect to the intended use limitations, the device disclosed by the combination of Kim et al. and Alberte et al. as disclosed above is structurally the same as the instantly claimed and is capable of providing the operating conditions listed in the intended use section of the claim. Note statements of intended use carry no patentable weight when the structure of the Claim has been met by the prior art reference.

Regarding Claims 2-3 and 202, Kim et al. ('184) teaches wherein said carrier is substantially made of a material selected from the group consisting of a polydimethylsiloxane, an elastomer and silicon rubber (Paragraphs 138 and 143).

Regarding Claims 6-7, Kim et al. ('184) teaches wherein the carrier can be formed by molding (Paragraph 194). Therefor the device is capable of deforming in at least one dimension and changing the size of the wells.

Regarding Claims 18, 22, 27, 29, and 153, the rejection of claim 1 above is relied upon.

Kim et al. ('184) teaches the device of claim 1 except for wherein the carrier and cover are made of gel; placing a gellable fluid in proximity with said surface so as to fill said wells and gelling said gellable fluid so as to form a gel cover.

Bochner et al. ('045) teaches a method of manipulating cells, comprising: providing a plurality of wells of a well-bearing component, each well configured to hold at least one living cell; holding a plurality of living cells in a plurality of said wells; placing a gellable fluid in proximity with said surface so as to fill said plurality of wells; and gelling said gellable fluid so as to form a gel cover (Col 8, line 65-Col 9, line 34).

The examiner interprets the gel matrix of Bochner to be a cover once produced, trapping the suspended microorganisms.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Kim with the gelling agents as taught by Bochner et al. in order to

provide a testing system that does not spill from the microplate, even if the microplate was inverted and allows novice to work with bacteria and study their biochemical characteristics with a reduced chance of contamination.

With respect to the intended use limitations, the device disclosed by the combination Kim Alberte et al., and Bochner et al. is structurally the same as the instantly claimed and is capable of providing the operating conditions listed in the intended use section of the claim. Note statements of intended use carry no patentable weight when the structure of the Claim has been met by the prior art reference.

Regarding Claims 43, 49 and 214, Kim et al. ('184) teaches wherein the dimensions of said wells are less than about 200 microns (Paragraph 142).

Regarding Claim 68, Kim et al. ('184) teaches protuberances protruding from said surface between two adjacent wells (Paragraph 135; Figures 1b:160a; 1b:150a). As interpreted by the examiner, Figure 1b discloses protuberances [150 and 160].

Regarding Claims 121, 130, 132, 139, Kim et al. ('184) teaches a method of making a chip-device of claim 1 comprising: providing a template having a negative of features of said surface of said carrier; contacting said template with a precursor material so as to create said features in said precursor material; and fixing said features in said precursor material so as to fashion said carrier (Paragraphs 190-199 and Figures 9a, 9b, 10a through 10c and 11a through 11c).

PDMS is viscoelastic, meaning that at long flow times (or high temperatures), it acts like a viscous liquid, similar to honey (of which the examiner interprets to be the same as a gellable fluid) which can flow to cover the surface and mold to any surface imperfections. However at short flow times (or low temperatures) it acts like an elastic solid, similar to rubber.

Regarding Claims 178-179 and 181, Kim ('184) teaches contacting an active entity-containing fluid with the well bearing device (Paragraph 205, 208 and 214). Kim also teaches wherein the cells were removed from the macro-wells (Paragraph 293).

Regarding Claim 186, Kim et al. ('184) teaches a method of growing cells comprising: providing a well-bearing device; holding at least one living cell in a well of said well-bearing device (Figure 1); and increasing the size of said well so as to provide an increased space for proliferation of said cell (Paragraph 208). Kim et al. teaches first layer [150] comprising micro-orifices [300] and second layer [160] comprising macro-orifices [170] (See Figure 7a through 7c).

Regarding Claim 193, the rejection of claim 1 above is relied upon.

Kim et al. ('184) teaches a method comprising: providing a well-bearing device, said well-bearing device having: a plurality of wells disposed on a surface, each well configured to hold at least one cell; and a plurality of protuberances protruding from said surface contacting the biological sample with said surface so as to remove cells from the biological sample (Paragraphs 135, 208 and Figures 1 and 1b). Kim et al. teaches protuberances protruding from said surface between two adjacent wells (Paragraph 135; Figures 1b:160a; 1b:150a). As interpreted by the examiner, Figure 1b discloses protuberances [150 and 160].

Regarding Claim 194, Kim et al. ('184) teaches wherein said wells are formed in said surface (See Figures 9a, 9b, 10a through 10c and 11a through 11c).

Regarding Claim 196, Kim et al. ('184) teaches the micro-orifices 300 of the first layer 150 may have any other arrangement that would be within the knowledge of a person skilled in the art, such as, for example, a rectangular, hexagonal, circular or any another arrangement (Paragraph 140).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to design a well with a rectangular cross-section, since it has been held to be within the general skill of a worker in the art to select a known shape and or orientation on

the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Claims 12, 90-91, and 198 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (US 20030030184) in view of Bochner et al. (US 5627045) in light of Alberte et al. (US 20020052003) as applied above to claim 1, further in light of Sanghera et al. (US 5525800) and Hahn et al. (US 20030017079).

The rejection of claim 1 above is relied upon.

Regarding Claims 12, 90 and 198, Kim et al. ('184) teaches a chip-device for holding living cells, the device comprising a carrier [100] having a plurality of wells [170] disposed on a surface each well configured to hold at least one living cell, the device characterized in that said carrier is made of PDMS, a material having an index of refraction similar to that of water (Paragraphs 138 and 143).

PDMS is well known on the art to have a refractive index of about 1.4 as evidenced by Sanghera et al. in Col 8, lines 54-56 which is close to the refractive index of water which is equal to 1.33 as evidenced by Hahn et al. in Paragraph 19.

Regarding Claim 91 Kim et al. ('184) teaches a chip-device for holding living cells, the device comprising a carrier [100] having a plurality of wells [170] disposed on a surface each well configured to hold at least one living cell, the device characterized in that said carrier is made of a material having an index of refraction similar to that of water (Paragraphs 138 and 143).

PDMS is well known on the art to have a refractive index of about 1.4 as evidenced by Sanghera et al. in Col 8, lines 54-56 which is close to the refractive index of water which is equal to 1.33 as evidenced by Hahn et al. in Paragraph 19.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Kim with a material having an index of refraction less than about

1.4, in order to optimize the carriers ability to identify the particular living cell, confirm its purity or measure its concentration via the use of an optical system.

Claims 210-213 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (US 20030030184) in view of Bochner et al. (US 5627045) in light of Alberte et al. (US 20020052003) as disclosed above in claim 207, further in view of Oldenburg et al. (US 6027695).

Regarding Claims 210-212, Kim et al., Bochner et al. and Alberte et al. do not disclose the use of vapor deposition.

However, Kim et al. ('184) does teach gelling wherein the gel-forming matrix is in liquid form, allowing for easy dispensing of the suspension into the compartments. These compartments contain dried biochemicals and cations. Upon contact of the gel-forming matrix with the cations, the suspension solidifies to form a soft gel (Col 9, lines 2-6).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the coating by vapor deposition since chemical vapor deposition was well known in the art that as evidence by Oldenburg et al. ('695) who teaches wherein microwells of a microtiter plate can be coated by vapor deposition to enhance the performance of the microtiter plate (Col 8, lines 30-42).

Regarding Claim 213, Kim et al., Bochner et al. and Alberte et al. do not disclose wherein the of said precursor material is a vapor of para-xylylene molecules or derivatives thereof and the layer comprises the polymerized para-xylylene molecules, or derivatives thereof.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a suitable precursor material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LYDIA EDWARDS whose telephone number is (571)270-3242. The examiner can normally be reached on Mon-Thur 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Marcheschi can be reached on 571.272.1374. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael A Marcheschi/
Supervisory Patent Examiner, Art Unit 1775

/LYDIA EDWARDS/
Examiner
Art Unit 1775

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